

12-20-2019

## Young Children with Autism Spectrum Disorder in Early Education and Care: The Earlier We Begin Together, The Better

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ISSN 1918-5227

Pages 77- 91

Funded by the Margaret & Wallace McCain Family Foundation

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### Recommended Citation

Maich, K., Davies, A. W., Penney, S. C., Butler, E., Young, G. D., & Philpott, D. (2019) Young Children with Autism Spectrum Disorder in Early Education and Care: The Earlier We Begin Together, The Better. *Exceptionality Education International*, 29, 77-91. Retrieved from <https://ir.lib.uwo.ca/eei/vol29/iss3/6>

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## Cover Page Footnote

Funded by the Margaret & Wallace McCain Family Foundation

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## **Young Children with Autism Spectrum Disorder in Early Education and Care: The Earlier We Begin Together, the Better**

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### **Abstract**

*High quality early intervention is a crucial component of supportive and inclusive early childhood education and care (ECEC) and crucial for children with autism spectrum disorder (ASD). For children with ASD, there is limited access to ECEC services and there is little research or writing on the importance of bridging even conversations between the fields of ECEC and special education needs. This paper addresses the importance of starting a conversation by delineating current literature on ASD and early intervention services while making recommendations for how practitioners and policy-makers can consider the needs of young children with ASD in ECEC programming, bringing together clinicians and educators in ECEC settings into broader and closer collaborations. Through investigating current wide-scale reports on ASD in ECEC and inclusive settings, screening, early intervention, and evidence-based interventions, as well as the specific needs of parents of children with ASD, we seek to bring such essential discussions to the forefront. In turn, practitioners can provide supportive early-years environments for children with ASD, as well as early intervention and identification services that support inclusive practices.*

The burgeoning prevalence rate of young children with autism spectrum disorder (ASD), paired with the complexity of their everyday needs, necessitates important conversations around the benefits of quality early childhood education and care (ECEC). ECEC sites—though not consistently publicly funded—may voluntarily include children with disabilities, supporting inclusion on the basis of human rights rather than of specifically legislated practices. This well-researched group of children with ASD in Canada—and internationally—clearly benefits from early intervention during the child care years; yet, few with this diagnosis tend to be enrolled in formal ECEC programs (Killoran, Tymon, & Frempong, 2007). Early interventions typically appear to take the form of intensive, therapeutic approaches from an evidence-based behavioural framework, which may take place in clinical, home, or—more rarely—ECEC settings provided by clinicians and supported by educators. Such interventions are often funded by the relevant jurisdictional governments but may also be funded by family members or via non-profit community agencies (Autism Canada, 2017; Shepherd & Waddell, 2015). Everyone involved has much to gain from the participation of children with ASD and their families in ECEC programs supported by well-trained educators who can scaffold, nurture, and generalize skills being developed in clinical settings prior Grade 1. Still, further resources are needed to ensure the effective inclusion of children with ASD in early learning settings, from both educators and early intervention services working collaboratively for growth—and success.

For many parents, guardians, caregivers, and families, early intervention services within the foundational early years are difficult to navigate. Many professionals within the field of early intervention and ECEC have reflected on how the needs of families and children with disabilities are not being met by a currently decentralized early intervention system that features excessive waiting times (Underwood & Killoran, 2009). For those families navigating early intervention services, structures of race, ethnicity, colonialism, socio-economic class, and migration can additionally impact experiences with disability, intervention, and professional supports in the early years (Ineese-Nash, Bomberry, Underwood, & Hache, 2018; Khanlou et al., 2017). Racialized children and families, including children with Black, Afro, and Caribbean backgrounds (Lovelace, Tamayo, & Robertson, 2018) and in Latino/a/x communities (Lopez, 2014; Lopez & Magaña, 2018), experience additional challenges maneuvering early intervention services and socio-cultural constructions of ASD. For many families who come from varied cultural, linguistic, and/or social locations, the differing landscape and language around ASD and history are important to consider as the field endeavours to provide effective interventions and services for children with ASD and their families and inclusion for all children in ECEC environments. The purpose of this paper is to emphasize that closer collaboration between clinical and education partners supporting children with ASD in the ECEC context will result in better service provision—and successes—for our diverse children with ASD and their likewise diverse families, and will decrease demands for later school-based supports.

## **Foundations**

To understand research and literature in the field of ASD, it is important to recognize the contextual history of ASD and our changing understanding of related diagnoses over

time, including the elasticity in terminology following its origins. Since Leo Kanner and Hans Asperger brought the historic understanding of the term *autism* into public significance in the 1940s (Lyons & Fitzgerald, 2007; Neumärker, 2003; Wing & Potter, 2002), differentiating this group from children previously thought to have childhood schizophrenia, it is now understood as a wide-spectrum diagnostic area that can be part of complex, dual diagnoses. Following the initial work of Kanner and Asperger, in the interim, little positive literature was published that moved the field of forward in a positive way until the 1960s (Thompson, 2013).

In 2013, in a marked and recent departure from the previous five subdiagnoses of ASD, the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* offered a single category of ASD to represent what is termed a social communication disorder with restricted, repetitive behaviours and three levels of severity (American Psychiatric Association, 2000; American Psychiatric Association, 2013; Autism Speaks, 2015). ASD has a rising prevalence rate in Canada and beyond and is considered “one of the most challenging public health issues today” (Johnson, Myers, and the Council on Children With Disabilities, 2007, p. 1185). It is essential to recognize that changing criteria for diagnoses and understanding of the ASD diagnosis complicates research and its outcomes over time, including those related to early interventions. It is also essential to recognize that skill development provided by such interventions may focus on such foundational skills such as communication, socialization, behaviour, and functional skills of daily living and may demand an intensive level of services, including those needed to transition to the school environment. The earlier that clinicians and educators begin, the better. And the earlier we begin collaborating together as clinicians and educators and in ECEC environments, even better again.

## **A Broad Look**

When it comes to children with ASD within ECEC contexts, wide-scale tracking, counting, and monitoring appears to be a challenging task. Perhaps this effect is unsurprising when it is considered that the first comprehensive Canadian report on ASD prevalence itself was not published until 2018 (Public Health Agency of Canada, 2018) and that both education and clinical services are provided in discrete geopolitical divisions. Overall, the Canadian prevalence rate for 2015 was calculated at 1 in 66 for ages 5 to 17. It is also important to note that the ratio of male to female diagnosis was calculated at 4:1, making this an especially important conversation considering the gendered nature of ASD diagnoses. More than half of these ASD diagnoses (56%) occurred by age 6 and almost 75% by age 8 (Public Health Agency of Canada, 2018), meaning that more than half of children with ASD are diagnosed during the early years, highlighting the need, and possibilities, for active levels of participation and access to early intervention in ECEC programs.

Across Canada, funding related to such early intervention and its practices—as well as support throughout the lifespan in both health and educational services—is jurisdictionally controlled by provincial or territorial ministries. Autism Canada (2017) compiled the most recent jurisdictional funding options, ranging from those provinces or territories with multiple ASD-specific funded programs for children and families

including British Columbia, to funding for adults with disabilities such as Ontario, to no ASD-specific funded programs such as Nunavut. Varied combinations of direct, program-specific to individualized funding models are used for third-party interventions; and intensive funding for therapeutic interventions for young children with ASD is a focus across Canada (see [Early] Intensive Behaviour Intervention, below). In one example of research in the Canadian context, Volden et al. (2015) reviewed related service provision for preschool children with ASD using a cross-Canada sample of more than 400 young children. They concluded that some type of specialized service was typically in place within a few months of a formal diagnosis, and behavioural services were provided to more than half by the end of a year after diagnosis. By the age of school entry, close to 95% of these children were receiving at least some service with some variance by population density and jurisdiction in Canada.

Even with this diversity in service provision across the country—which Shepherd and Wadell (2015) suggested will continue to vary—some commonalities exist in a broad look across Canada. One issue that is not isolated to a particular geopolitical boundary is related to what can be aptly described with terms such as *acrimony*, *conflict*, and even *litigation*, in which related concerns like rights and legislation are under intense scrutiny (Shepherd & Wadell, 2015). Another common issue across this broad geopolitical context is the financial impact on families. Emrey and Dudley (2014) concluded that:

If that child is severely impacted and requires constant and lifelong supports, then the value of caregiver time required to support that individual is approximately \$5.5 million higher than that for someone without autism. An autism diagnosis of a high-needs child at age two represents the equivalent of telling the family that they must make an immediate lump-sum investment on that day of \$1.6 million, invested at a five-per-cent return, to pay for the lifetime costs of care and support their loved one will require. And that amount does not even account for added professional services, such as speech therapists, psychologists, and occupational therapists, or additional out-of-pocket expenses that may be required, such as special equipment or diets. (p. 1)

Legislation demanding inclusion and funding to provide effective services include collaborative clinical and educational services in ECEC settings will help to move this financial burden of care from individual families to government-funded support services. These changes are important, perhaps even more so, in an era of decreasing funding and decreasing service provision.

## Child Care Reports

Few reports on early learning, child care, and inclusive child care (either nationally or internationally) include information that is specific to the ASD diagnosis to assist readers in understanding how young children with ASD intersect the ECEC field. Some Canadian provinces, such as Newfoundland and Labrador, note that statistics are not kept on children with special needs in ECEC programs and that regions categorize disability differently (e.g., neurological conditions; Akbari & McCuaig, 2017; Friendly et al., 2018, p. 6). This approach may relate to age of diagnosis, a desire for inclusivity, a non-categorical approach, or parents who are concerned about rejection: The latter may be a justified parental concern. One research team, for example, found that 35% of ECEC

programs in the Toronto, Ontario, area refused to admit children who already had disability labels (Killoran et al., 2007). Other provinces report total numbers of children using their support services in child care settings, but do not specify the number of children with ASD receiving services (e.g., Friendly et al., 2018). Further international examples are below.

The *Welcoming All Children: Creating Inclusive Child Care* report, revised by the Community Integration Committee of the First Steps Interagency Coordinating Council in an Indiana context (Traub, Hutter-Pishgahi, & Freeman, 2004), mentioned ASD as part of a recommendation for utilizing person-first language (i.e., “a child with ASD”). However, little other mention of ASD exists in this document. In a Zimbabwean context, participants in Majoko’s (2017) research reported how the usage of reinforcements, structured routines, and academic and environmental modifications assisted in the inclusion of children with ASD in early childhood development classrooms. Still, Majoko (2017) noted the necessity of further teacher preparedness and training regarding inclusive practices in early learning settings for children with ASD in Zimbabwe. In their literature review, Franz, Chambers, von Isenburg, and de Vries (2017) noted the lack of standardization and quality research methodologies in research studies on ASD in sub-Saharan Africa. Franz et al. described the unique geographical and epidemiological situation of sub-Saharan Africa in terms of comorbidity levels of ASD with other diagnoses in the sub-Saharan region. Furthermore, this literature review stated the absence of specific research and policy work and clinical interventions for children with ASD in a sub-Saharan context. In a Brazilian situation, Block and Cavalcante (2012) explicated how services for children with ASD in Brazil are fragmented, with many practitioners not possessing the required knowledge and training to formally assess and screen for ASD in children. As well, notably, Block and Cavalcante described the tensions in Brazil between parent-led models for intervention as opposed to professionally driven supports. On an international level as well as on national and provincial or territorial levels, such areas of need continue to emerge regarding the best interests and approaches for early intervention for children with ASD in ECEC settings.

### **The Earlier, the Better**

**Universal screening.** Universal early screening is one way that young children might be flagged for concerns related to ASD; however, early screening is an area of ongoing controversy. One research team systematically examined reviews of universal screening and found only three examples related to ASD (Letto & Bornstein, 2018). In these few examples, they noted substantial risks of bias, reported that results of universal screenings are inconclusive, and that research is insufficient to conclude that such tools are more helpful than harmful. They also shared that the Canadian Task Force on Preventative Health Care (2016) recommended “against screening for developmental delay using standardized tools in children aged 1 to 4 years with no apparent signs of developmental delay and whose parents and clinicians have no concerns about development” (p. 14). However, the need for prompt and comprehensive responses to concerned parents, educators, and clinicians who identify red flags related to ASD is a necessity for funding and support, and is part of ongoing developmental surveillance (Canadian Task Force on Preventative Health Care, 2016).



**Age of impact.** Research on training for educators (early childhood educators and K–12 teachers) is scant when it comes to childhood exceptionalities, inclusion, and specifically ASD, much less on evidence-based strategies (see Evidence-Based Interventions, below) used to teach children with ASD. However, a recent meta-analysis related to social-communication skills in the United States context found that the maximum benefits for related treatments occurred between ages 3 and 4 (precisely, age 3.81; Fuller & Kaiser, 2019)—notably prime child care years. Practical applications of inclusion-related learning within ECEC programs and within K–12 settings is an ongoing issue, although inclusion is considered to be the best-practice approach in Canada (e.g., Halfon & Friendly, 2013; Killoran et al., 2007).

**Early intervention.** Evidence-based practice and evidence-based interventions in the field of ASD are also an important part of this conversation. One systematic review of 40 research projects (French & Kennedy, 2018) focused on early intervention for infants and/or young children with ASD diagnoses or risks, with the specific purpose of identifying the evidence behind the intervention. This review of random controlled trials is notable due to its status as the first comprehensive, systematic examination of the evidence around early intervention (birth to age 6) in the field of ASD (French & Kennedy, 2018). Within the 32 varied intervention approaches included in these research projects, no common approach or ingredient for ASD intervention was found.

Researchers have, however, identified how social communication is essential within and beyond the early years and that inclusive environments do provide social, cognitive, and other opportunities for skill development, as well as effective interventions that help some subgroups of children with ASD. For example, children with more severe impairments (social skills, adaptive behaviour) may benefit more from inclusive ECEC programs (Hanline & Correa-Torres, 2012; Rogers & Johnson, 2018; Wolfe & Hall, 2003). It appears to be worth further investigation of whether specific clinical profiles and specific ECEC programs can be more closely identified and matched for greater success in young children with ASD (e.g., Hansen, Blakely, Dolata, Raulston, & Machalicek, 2014; Nahmias, Kase, & Mandell, 2014). Surely, higher levels of intensive skill development provided by clinicians and educators with or within accessible ECEC programs would support positive transitions in the school environment with decreased demands for school-based resources. It is well established that early intervention works. How much better might consistent and collaborative early intervention be, using evidence-based interventions supported by legislation and funding in ECEC environments?

## **Evidence-Based Interventions**

The behaviour field categorizes and evaluates research with a different lens. Two major reports are of particularly recent importance when it comes to examining what interventions are successful. These are Wong et al.'s *Evidence-Based Practices for Children, Youth, and Young Adults with ASD* (2014) and the National Autism Centre's *National Standards Project*, now in its second phase (2015). Other groups have also undertaken similar work around evidence-based interventions though on a smaller scale. Some other options for an overview of evidence-based interventions are the likewise

recent Canadian *Evidence-Based Practices for Individuals with ASD* (Ontario Association for Behaviour Analysis, 2019) and Autism in Education's (Atlantic provinces) *Evidence-Based Practice for Learners with Autism Spectrum Disorder* (Bulmer et al., 2016). None of these reports supersedes another; rather, they provide varied perspectives on this topic from a North American perspective in major, impactful ways, and in more minor ways. At minimum, the first two are considered essential reports to consult regarding interventions in the field of ASD. Interventions focused on applied behavioural analysis (ABA) feature prominently in these fundamental reports. A well-known intensive intervention for young children with ASD is a subset of ABA (defined below), most often referred to as some derivation of (early) intensive behavioural intervention [(E)IBI or IBI]. It is categorized as an established therapeutic intervention by the National Autism Centre provided in a 25- to 40-hours-per-week intensity; however, target skills for daily life in home, school, and community are informed by assessment and developed by a team (e.g., parents, educators, and clinicians). The target ages for establishing this intervention were birth to 9 years of age to ensure skill-building (e.g., academic readiness) and decreasing behaviours (e.g., problem behaviours).

### **(Early) Intensive Behaviour Intervention**

ABA is defined, in part, as “the science in which tactics derived from the principles of behaviour are applied systematically to improve socially significant behaviour” (Cooper, Heron, & Heward, 2007, p. 20). However, it is essential to understand that Cooper et al.'s North American geopolitical lens of this applied research is not necessarily a worldwide perspective in the field of ASD. Major health care reports from 2013 and 2014 in the United Kingdom include conclusions that there was no evidence for the use of ABA and no possibility of ranking its use as a field of intervention (Keenan, 2016). The National Autism Centre's term is *comprehensive behavioral treatment for young children*; they define it as:

intensive early behavioral interventions that target a range of essential skills which define or are associated with autism spectrum disorder (ASD) (e.g., communication, social, and pre-academic/academic skills, etc.). These interventions are often described as ABA (or applied behavior analysis), EIBI (or Early Intensive Behavioral Intervention), or behavioral inclusive programs. (National Autism Centre, 2017, p. 47)

From its outset, research (Lovaas, 1987) on (E)IBI established its greater effectiveness with young children. More recent research concluded that “early intervention has been recognized as the best indicator for optimal outcome” (Booth & Keenan, 2016, p. 16). Due to this typical conclusion, Canadian jurisdictions have increased funding for this intervention type (Shepherd & Waddell, 2015). In theory and practice, trained and skilled early childhood educators would be able to utilize, reinforce, and generalize the principles of ABA that are embedded into individualized programs to support inclusion of children with ASD in ECEC programs. Still, challenges emerge with incorporating ABA into the principles of ECEC programming, including funding from the provincial level and the necessity of professional training and development for early childhood educators. In an Ontario context, McLaughlin and Schnider (2019) found in their survey of families of children and youth with ASD that a lack of funding

significantly impacted family access to ABA therapy, with 44% of surveyed participants reporting this as a challenge. As these examples illustrate, in order for early childhood educators to effectively implement the principles of ABA in their practice, further considerations are necessary around funding such services, as well as the professional training required for educators.

It is well known that ASD is a heterogeneous condition along a continuum or spectrum of characteristics. Subsequently, best practices and interventions are highly individualized, resulting in disagreements between research findings: The above-noted gains through (E)IBI may or may not persist when compared to other interventions (Howard, Stanislaw, Green, Sparkman, & Cohen, 2014; Kovshoff, Hastings, & Remington, 2011). However, it is also important to note that early intervention may need to be paired with ongoing supports and intervention in order to ensure that gains persist into adulthood. For example, in one longitudinal study that included three phases of assessment, researchers found “significant gains” (i.e., IQ gains and decreased symptomology) at age 6 compared to a group with dissimilar interventions; however, these positive contrasting gains disappeared in early adulthood (Jónsdóttir, Brynjarsdóttir, Saemundsen, & Sigurdsson, 2018). It is also essential to realize that some parents disagree with the emphasis placed on one model of intervention and its focus in the early years and that some adults with ASD are also speaking out about negative childhood experiences related to (E)IBI (Dawson, 2004; Langan, 2011). Parental involvement in decision making on how best to support their child is essential (Balli, 2016; Underwood, 2010). In general, many major longitudinal studies that discuss the benefits of ECEC have overlooked ASD and, thus, have not then provided outcomes specific to children diagnosed with ASD (Barnett, Jung, Youn, & Frede, 2013; Peters et al., 2010). This evident lack of specific coding of the ASD diagnosis in the early years proves to be a problematic area for researchers attempting to extract specific recommendations to support young children with ASD diagnoses.

Even with the proliferation of ABA-based strategies evident in therapy and research, its application in school environments and ECEC programs—in which both ongoing collaborations and centre-by-centre, case-by-case services are provided—can be challenging. Though young children may be diagnosed with ASD when they are attending ECEC programs, diagnostic-specific statistics appear unavailable (excepting that the majority are diagnosed before age 6; Public Health Agency of Canada, 2018). Educators in ECEC programs attempting to provide effective accommodations or interventions to young children with ASD diagnoses or characteristics are often untrained and are “left alone without personnel support or helpful resources” (Brodzeller, Ottley, Jung, & Coogle, 2018, p. 278). The jurisdictional Early Development Instruments (EDI), described as population-based measures for communities, are not specific to the diagnosis of ASD and do not include a specific social, communication, or neurodevelopmental disorders category. Looking slightly ahead in age from child care settings, Ontario’s 2014/2015 summary report around EDI reported that 11.7% of (i.e., 14,779) children had special concerns or problems (including subcategories such as behavioural problems); 4.9% of these children were receiving specialized supports at school and 3.8% were wait-listed for assessment in senior kindergarten (now Year 2 in Ontario; Offord Centre for Child Studies (2014/2015).

## **Parents**

As well as locating, accessing, and advocating for services, including early intervention services, parents themselves also seek further education in ASD. Research has identified that “the relationship between the role of parents and diagnosed children has changed significantly over time, shifting from historic, pointed blame to a changed understanding of their critical membership on treatment teams” (Alves & Maich, 2019, p. 4). Other research identified that parent education is often recommended as an adjunct to child-focused intervention services (National Research Council, 2001; Steiner, Koegel, Koegel, & Ence, 2012). One urban centre in Ontario provided 10 group-based parent education sessions to 141 participants and concluded that “parents were better informed on characteristics of ASD, aware of available community resources and how to access them, and had perceived competence in their abilities to use behaviour analytic methods to support their children’s learning” (Alves & Maich, 2019, p. 16). Informed and aware parents do make a difference in the lives of their children and in the wider field of ASD.

In a qualitative examination of ASD policy in the Canadian context, researchers found that “Canadian autism policy has been characterized by intense acrimony, potentially hindering progress on improving children’s services” (Shepherd & Waddell, 2015, p. 3562), and that parents continue to influence services for all children with ASD throughout their lives. The researchers described this successful, influential, and even litigious advocacy for children as extraordinary for families and children with extraordinary burdens. Parents in this study talked about the shock, panic, and urgency to find early interventions—calling it a quest and also an investment in the future. Yet, it is important to also realize the context of interventions for very young children with ASD: That research around intervention for toddler-aged children is in its first generation (Schertz, Baker, Hurwitz, & Benner, 2011; Shepherd & Waddell, 2015).

## **Summary**

It is essential to understand that such intensive and ongoing support (or the lack of it) for young children with ASD does affect families of young children with ASD, especially mothers (Maich, Davies, & Sohrabi, 2019). In a review of Canadian and international literature related to parental employment, a research team (Maich et al., 2019) articulated that “the uniqueness of the experience of having a child with autism in comparison with other chronic or physical disabilities,” and that “mothers may reduce their employment hours or quit working outside the home to care for their child with a developmental disability” (p. 108). Other researchers (Houser, McCarthy, Lawer, and Mandell, 2014) reflected that “there may be something about ASD that differentiates it from other special health care needs in the degree and nature of its impact on families’ daily routines, employment, financial status, and childcare arrangements” (p. 682) and found that reliability and training in child care related to ASD was an ongoing issue. They concluded: “It is arguably the case that those parents of children with ASD who most need stable and reliable care arrangements are least able to expend the time and resources necessary to secure them” (p. 682). Thus, there is a need for extra supports to ensure families and parents of children with ASD feel supported, particularly throughout the foundational early years and in ECEC environments.

It is further essential to develop federal or, at minimum, provincial and territorial legislation prohibiting the exclusion of children with ASD from inclusive ECEC programs, and to provide government-funded training and human resource support of a sufficient level to provide individualized education and care to young children with ASD in inclusive child care settings. Although inclusion is one of the guiding principles and progress indicators for annual reporting of ECEC contexts, such contexts of education and care are not comprehensively nor consistently publicly funded (Employment & Social Development Canada, 2018); thus, no specific legislation in the field addresses inclusion in a manner parallel to the publicly funded school system. More specifically, such training should be sufficient so that all ECEC staff can support young children with ASD, including recognizing signs of ASD and knowing the basics of evidence-based strategies such as ABA, how to integrate such strategies into current daily practices and approaches, and providing transitions between ECEC and K–12 school settings (Fontil, Sladeczek, Gittens, Kubishyn, & Habib, 2019). Beginning, continuing, and/or improving such transition supports helps to provide consistent and quality school-based services and to alleviate evident stress and demands on parents of young children with ASD (Fontil et al., 2019; Maich et al., 2019).

It is also clearly important to begin to prioritize the collection of prevalence data on young children with ASD or at risk of ASD in inclusive child care settings in order to describe the current state of support to plan for the future, and measure future change. In addition, collaborative policies and practices between inclusive ECEC settings and therapeutic, clinical services such as (E)IBIs should be encouraged, initiated, and supported as a part of everyday placement. This can ensure inclusion takes place for all children, that inclusion is not merely represented as a placement (Reid et al., 2018), and that clinical skills taught by clinicians are reinforced by educators in the ECEC field toward the goal of “follow[ing] inclusive practices for children with diverse needs” (Employment & Social Development Canada, 2018). Future work in the area of early intervention and services for ASD should integrate analyses that further investigate and acknowledge varied geopolitical contexts, structural inequalities, and differing socio-cultural constructions of ASD when bridging evident gaps between the early years and early interventions (Ineese-Nash et al., 2018). This is crucial to consider in the context of the early years, during which further support is necessary to ensure that diversity is supported and welcomed within inclusive settings (Allen et al., 2014).

Key points in this noteworthy topic include that more than half of those diagnosed with ASD receive their diagnosis during the early years; that early intervention in the form of (E)IBI appears to optimize skill development in young children with ASD; that skills developed in (E)IBI are intended to be reinforced and generalized in classroom settings; and that including ECEC programs and clinical/educator collaboration in ECEC settings is not yet supported, consistent, or robust. However, educators do not typically appear to be specifically trained in either ASD or its evidence-based interventions as a routine feature of professional preparation. Given that children with ASD need highly individualized models of intervention and support with parents as robust partners, it is clear that inclusive ECEC programs, with trained educators, can and should play a particularly pivotal role in supporting, reinforcing, and generalizing therapeutic

interventions to everyday settings and situations, in turn decreasing later demands on school-based supports and interventions.

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